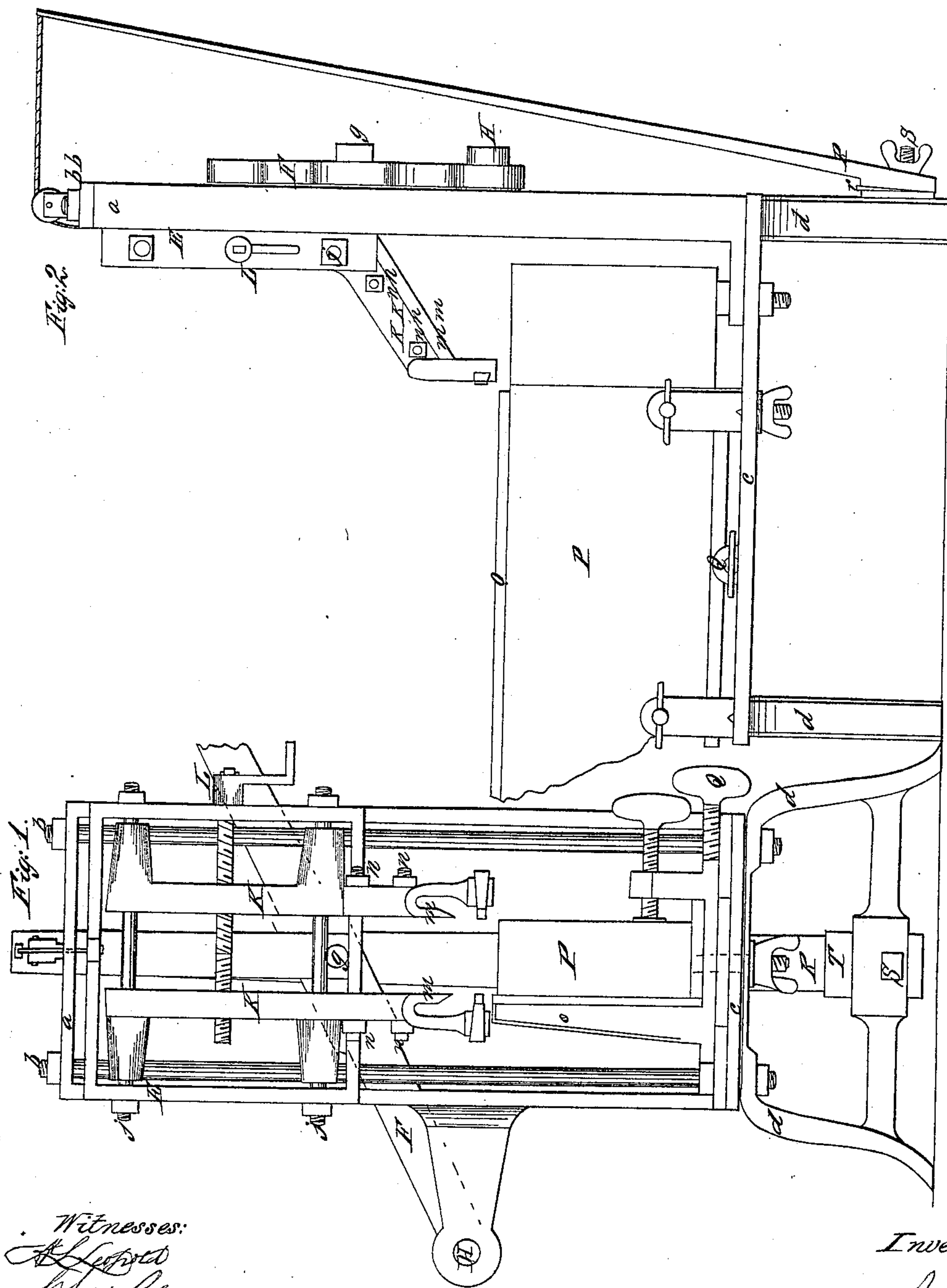


J. R. Perry,

Tenoning Machine.

N^o 26,122.

Patented Nov. 15, 1859.



Witnesses:
A. L. Perry
Chas. C. Perry

Inventor:
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UNITED STATES PATENT OFFICE.

J. R. PERRY, OF PORT CLINTON, PENNSYLVANIA.

MACHINE FOR CUTTING TENONS.

Specification of Letters Patent No. 26,122, dated November 15, 1859.

To all whom it may concern:

Be it known that I, Jos. R. PERRY, of Port Clinton, in the county of Schuylkill, in the State of Pennsylvania, have invented certain new and useful Improvements in Machines for Cutting Tenons; and I hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 represents a front view, and Fig. 2 a side view.

The letters of reference indicate the same parts in both figures.

My improvements relate to that class of machines which cut tenons, the sides of which are parallel planes, for use in carpentry or joinery.

The following is a description of the construction and operation of the machine.

a, is a cast iron frame which is firmly secured in a vertical position to a bed plate *c*, and to the legs *d*, by the guide rods *b*.

A cast iron frame *E* traverses vertically upon the guide rods *b*, and is operated by means of the lever handle *F*, which has its fulcrum at *H*. This lever has a slot at its bearing which enables it to slide upon the pin *g*, and elevate or depress the frame *E* in a vertical plane. Two guide rods *j* are fixed horizontally in the frame *E*, upon these the cutter heads *K*, traverse when actuated by the right and left hand screw *L*, working in corresponding nuts in the heads

K. The screw *L* is prevented from moving laterally by suitable collars or flanges, and is operated in the present instance by a crank handle but a ratchet wheel may be added, and worked by a pawl, pivoted to the frame *a*, this arrangement will cause the heads to approach each other a certain regulated distance each time the frame *E* is elevated. The guide rods *b*, and *j* may be substituted by *V*'s or other forms of guides as may be found most convenient in practice.

The steel bits *m*, are secured to the cutter heads by small bolts *n*, and are constructed with projecting ends or lugs, into which small knives or bits are inserted in a proper position to cut the shoulders on the rail, and prevent the cutters *m*, from tearing in.

O is a cast iron frame with set screws which hold the rail *P*, steady during the operation of cutting the tenon. The frame *O*, rests upon ways or guides which admit of lateral adjustment being given to it by the screw *Q*, for the purpose of bringing the rail into a proper position in relation to the cutters. A long wooden spring *R* is connected with the frame *E*, by a cord passing over a pulley on the top of the frame *a*, its recoil raises the frame *E*, when the pressure is removed from the handle *F*. The frame *O*, is held in position when adjusted by bolts, passing through slots in the ways upon which it rests. The tension of the spring *R* can be increased by lowering the slotted wedge *T*, and fixing it by the screw *S*.

In operation, the rail is secured upon the frame *O*, which is then adjusted by the means before described. The cutter heads are opened or separated from each other sufficiently to take a shaving from each side of the intended tenon when the lever handle is forced down. When the cutters are again elevated clear of the rail, a partial revolution of the screw either by hand or by the action of the pawl, and ratchet is given, to cause the heads to approach each other so as to take off another shaving, this operation is continued until the tenon is reduced to the required thickness, which may be regulated by a gage placed between the heads in any suitable manner to arrest their motion at the desired point.

What I claim as my invention and desire to secure by Letters Patent is—

1. The combination of the right and left hand screw *L*, with the cutter heads *K* in the manner and for the purpose set forth.

2. Constructing the cutter bits with lugs to receive the shoulder bits as herein specified.

In testimony whereof I have signed my name to this specification before two subscribing witnesses.

J. R. PERRY.

Witnesses:

A. L. LEOPOLD,
CHAS. CLAY.